

From wang!elf.wang.com!ucsd.edu!info-hams-relay Tue Mar 26 07:50:25 1991 remote
from tosspot
Received: by tosspot (1.64/waf)
via UUCP; Tue, 26 Mar 91 17:16:15 EST
for lee
Received: from somewhere by elf.wang.com id aa05295; Tue, 26 Mar 91 7:50:23 GMT
Received: from ucsd.edu by relay1.UU.NET with SMTP
(5.61/UUNET-shadow-mx) id AA21784; Mon, 25 Mar 91 19:02:25 -0500
Received: by ucsd.edu; id AA01715
sendmail 5.64/UCSD-2.1-sun
Mon, 25 Mar 91 12:46:31 -0800 for brian
Received: by ucsd.edu; id AA01673
sendmail 5.64/UCSD-2.1-sun
Mon, 25 Mar 91 12:46:14 -0800 for /usr/lib/sendmail -oc -odb -oQ/var/spool/
lqueue -oi -finfo-hams-relay info-hams-list
Message-Id: <9103252046.AA01673@ucsd.edu>
Date: Mon, 25 Mar 91 12:46:12 PST
From: Info-Hams Mailing List and Newsgroup <info-hams-relay@ucsd.edu>
Reply-To: Info-Hams@ucsd.edu
Subject: Info-Hams Digest V91 #238
To: Info-Hams@ucsd.edu

Info-Hams Digest Mon, 25 Mar 91 Volume 91 : Issue 238

Today's Topics:

Any hamradio stores in SEATTLE ? (2 msgs)
Appartment Antenna Suggestions?
DR-590 Manual
Ham interference on Cable TV?
LSB vs USB ad infinitum
magazines
MAJOR SOLAR FLARE ALERT - 25 MARCH (2 msgs)
Modifying an old CB radio
No Code issue makes Scientific American
Radio LANs to become legal in the UK?
Re: LSB vs USB ad infinitum (2 msgs)
Reading Presence of Signal on ICOM R-7000
Searching for crystal(s) (2 msgs)
the Freeband below 10 meters (2 msgs)
WANTED: Collins 32V-2 Manual...

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: 25 Mar 91 17:00:00 GMT
From: zephyr.ens.tek.com!cascade.ens.tek.com!ronk@uunet.uu.net
Subject: Any hamradio stores in SEATTLE ?
To: info-hams@ucsd.edu

In article <1991Mar25.001300.302@eecs.wsu.edu> ckinsman@yoda.UUCP (Chris Kinsman) writes:

>In article <1991Mar20.172546.21694@funet.fi> ms86817@cs.tut.fi (Suokko Matti (OH5MRM)) writes:

>>

>>

>>I'm going to visit in Seattle, USA, during the next summer and I'm

>>wondering if there is any *GOOD* hamradio store in the city ?

...

>Check out SEACOM.

>

>Chris

>

I would also recommend C-COM (I think there is only one - Customer COMunications). I have had very good turn around on phone orders and their prices are less than I can get locally.

Ron Kirkpatrick (It's in the mail)
Tektronix, Inc
503-627-6707

Date: 25 Mar 91 17:12:33 GMT
From: sdd.hp.com!hp-pcd!hplsla!tomb@ucsd.edu
Subject: Any hamradio stores in SEATTLE ?
To: info-hams@ucsd.edu

ckinsman@eecs.wsu.edu (Chris Kinsman) writes:

>Check out SEACOM.

I assume he means C-COMM, on 15th NW (around 6500 block).

Date: 25 Mar 91 13:21:59 GMT
From: usc!wuarchive!rex!ukma!s.ms.uky.edu!andreap@ucsd.edu
Subject: Appartment Antenna Suggestions?
To: info-hams@ucsd.edu

yannios@nikos.nyo.dec.com (Nicholas C. Yannios) writes:

>I'm looking for antenna recommendations for use in a high-rise apartment
building in
>New York City (32nd floor) . Unfortunately, the building management does not
allow
>anyone to put antennas on the roof and we do not have balconies. Therefore,
I'm
>constrained to having the antenna in my apartment . As a new Tech+, I would
like
>work 10 and 15 meters and maybe 40 and 80 with an ICOM-735. Thanks!

>Nick

At one point I used an attic-mounted Spider. The literature that came with
it said it would also work well mounted on a chair inside an apartment.
I made DX contacts with 40 countries using it with a 100w transceiver.

Harold G. Peach, Jr. Internet: hgpeach@ca.uky.edu
252 Ag. Engineering Bldg., U.Ky. Packet Radio: N4FLZ@KF4NB.KY.USA.NA
Lexington, KY 40546-0276 Phone: (606) 257-3335

Date: 25 Mar 91 15:41:37 GMT
From: news-mail-gateway@ucsd.edu
Subject: DR-590 Manual
To: info-hams@ucsd.edu

Well it is near completion, thank god! This was a major undertaking
to say the least. For those who are just tuning in for the first
time, I am writing the manual for ALINCO. It ultimately will be

distributed accordingly. The good news is that you can get it for
nothing! That bad news, no pictures...big deal right! OK...The manual
is running about 55 pages and covers just about everything everyone
has complained about in the last year. I would like to thank all of
you who made your comments known, and took the time to look over the
preliminary portions of the manual. It makes little sense to send 55
pages to the info_hams newsletter, so I will send them directly to
those of you who want to be a part of the ALPHA TEST phase. This

means use the manual and let me know what you like and don't. What needs to be more clear etc. When I receive your mail, I will send a test mail message to you to ensure that we have a connection and then when I receive your ok to my test message....the biggy will be on the way. To those who forwarded me their sase...the schematics will

be copied today and sent tomorrow...promise!

Copies will begin to go out on Late Tuesday/early Wednesday .

ENJOY! It came out nice!!

JAY (KA1SNA)

Date: 25 Mar 91 19:38:46 GMT
From: epic!karn@bellcore.bellcore.com
Subject: Ham interference on Cable TV?
To: info-hams@ucsd.edu

I don't know if my experience is typical, but the hardest problem I had in getting some local CATV leaks fixed was finding the right people within the company to talk to. In my case, the problem was with some hardline connectors on an amplifier on a pole, not with a customer drop. The regular customer service people haven't a clue, and of course the installers don't deal with the feeder facilities.

In my case, I was reading 8 microvolts of HBO sound carrier on the terminals of my 2m satellite antenna when it was aimed at the offending connection - over 500 feet away! It took a threat to notify the FCC to get them moving, but they finally did fix the problem. It turns out they have a special crew that maintains this part of their plant, but they seem to keep its existence a secret.

Ham clubs ought to develop standing contacts with their local CATV companies so they know who to call when these things happen. It would be far better if these problems could be handled on an amicable, cooperative basis, without having to threaten to involve the FCC. After all, bad feeder connections also affect picture quality (by introducing standing waves) so the CATV companies ought to have an incentive to fix them. Rather than look at the hams as an annoyance, the CATV companies should see them as a valuable resource - groups of technically skilled people willing to locate leaks for free.

Phil

Date: 25 Mar 91 19:19:20 GMT
From: w8grt!jim.grubs@uunet.uu.net
Subject: LSB vs USB ad infinitum
To: info-hams@ucsd.edu

> From: macmillan@iccgcc.decnec.ab.com
> Date: 20 Mar 91 17:01:02 GMT
> Message-ID: <3874.27e74efe@iccgcc.decnec.ab.com>
> Newsgroups: rec.radio.amateur.misc
>
> In the never ending saga of LSB-USB I may have missed this item, but
> just in case....
>
> The dividing line between common use of LSB and USB seems to be 9 MHz.
> If you were home brewing an SSB exciter you could get a two band
> transmitter or transceiver with a 9 MHz USB IF and a 5.0-5.5 MHz VFO.
>
> Add the two and USB appears from 14.0-14.5 MHz. Subtract and you will
> get 4.0-3.5 MHz. The subtraction process has also inverted the sideband
> and it is now LSB.

The 9 mhz I.F. was selected primarily because of the widely (and cheaply)
available ARC-5 series of WW2 military surplus aircraft transmitters. One of
them worked at 5.0 - 5.?. Properly converted, they made very stable VFOs with
jewel bearings, no less.

--

Jim Grubs - via FidoNet node 1:234/1
UUCP: ...!uunet!w8grt!jim.grubs
INTERNET: jim.grubs@w8grt.fidonet.org

Date: 25 Mar 91 19:10:51 GMT
From: swrinde!zaphod.mps.ohio-state.edu!rpi!uwm.edu!ux1.cso.uiuc.edu!
rtaylor@ucsd.edu
Subject: magazines
To: info-hams@ucsd.edu

I have complete set of 73 Magazines, including first issue, except missing one oor
two. I also have a complete set of Ham Radio. I have heard the first issue
of 73 was worth a couple hundred dollars. Anybody have any idea what these sets
might be worth and to whom? K9ALD 217-586-4958
:wq

Date: 25 Mar 91 07:04:00 GMT

From: news-mail-gateway@ucsd.edu
Subject: MAJOR SOLAR FLARE ALERT - 25 MARCH
To: info-hams@ucsd.edu

-- MAJOR SOLAR FLARE ALERT --

MARCH 25, 1991

Flare Event Summary
MODERATE IMPACTS POSSIBLE

MAJOR ENERGETIC EVENT SUMMARY

Another major X-class flare erupted from Region 6555 early this UT day. The flare was not well covered by optical flare patrols. Beginning and end times are uncertain. From the data received so far, the event began sometime before 23:27 UT on 24 March, peaked near 00:19 UT and ended sometime after 01:03 UT on 25 March. The flare was rated a class X1.1/1B event (although the optical rating is not yet definite) and was located at S26E01. The integrated x-ray flux was not particularly intense, but was "moderate" nonetheless (rated at 0.110 Joules / meter²). Radio coverage of this event was difficult, in part due to the intense magnetic storming which was in progress at the time of this event. However, there was an unconfirmed report of a Type IV event. This is not official yet.

Region 6555 is now located at S24W11 and is maintaining a very potent configuration. It has high magnetic gradients, high amounts of shear and is a Beta-Gamma-Delta magnetic configuration. This region is expected to continue to produce potentially significant major solar flares. It is very capable of producing strong terrestrial impacts if a particularly intense flare occurs.

POTENTIAL TERRESTRIAL IMPACT ASSESSMENT

This latest flare has a good possibility for producing a potentially minor geomagnetic storm. The flare probably won't be capable of producing a storm as intense as the class X9.4/3B flare of 22 March (which we are experiencing now), but a disturbance is possible. The probability is rated at near 50% for a minor geomagnetic storm. Models suggest an estimated magnetic planetary A-index of about 44 on 27 March if this flare produces a terrestrial impact. However, it should be noted that predicting geomagnetic activity from major flares is a very difficult process with

fairly high failure rates, particularly with borderline flares as this one is.

If protons become enhanced within the next six hours, a terrestrial impact will be more likely. Until this is known, the probability for terrestrial impacts will remain at about 50%. If terrestrial impacts do materialize, they will likely begin near the middle to latter part of the UT day on 26 March, with possible storm periods (mostly over the higher latitudes) on 27 March.

Solar protons have decayed substantially from yesterdays values. Current proton levels are at near 250 pfu at greater than 10 MeV. The greater than 100 MeV protons have decayed to values near 4 pfu. The PCA absorption is currently running near 1.4 dB's, which is significantly reduced over yesterdays values. The PCA is expected to end within the next 24 hours, unless protons become enhanced from the recent major flare. The satellite proton event will likely endure for the next 48 hours, barring any further major flaring.

Major flaring is expected to continue out of Region 6555. A high risk exists for potential major proton flaring from this region. It is in a sensitive position for producing terrestrial impacts and will remain in that position for the next three to four days. Watch for possible future flare alerts.

For geomagnetic information, consult the recent Geomagnetic Storm Informational Update #1 (06:00 UT, 25 March). Radio propagation information is also included therein together with the forecast conditions.

** End of Alert **

Date: 25 Mar 91 15:22:57 GMT
From: swrinde!zaphod.mps.ohio-state.edu!pacific.mps.ohio-state.edu!linac!
carlson@ucsd.edu
Subject: MAJOR SOLAR FLARE ALERT - 25 MARCH
To: info-hams@ucsd.edu

Did anyone else on the net spend as much time watching last night's auroral display as operating ?? Here in EN-51 6 thru 432 were "abuzz" with activity, on 2 meters I worked FM-29, FN-10, EM-66 and a few dozen others, but the real excitement was the OVERHEAD display. The Aurora was visible overhead and to the south (further south than the position of the moon by about 10 Dgs at 0345 UTC). It was a dazzling display of reds and pinks which is more typical of what I have seen at my cabin in Ely, Minnesota (EN-47) than here 38 miles west of Chicago.

By the way, can anyone recommend any airport/FBO in the Dayton area for the DAYTON HAMFEST. I am looking for a 3-day/2-nite tiedown, ect and I will be staying in the NW Dayton area....

73 es GD *AU* DX,

Kermit W9XA

Date: 25 Mar 91 15:25:05 GMT
From: usc!cs.utexas.edu!ut-emx!ccwf.cc.utexas.edu@ucsd.edu
Subject: Modifying an old CB radio
To: info-hams@ucsd.edu

Hi again. I'm trying to modify an old 23 channel CB radio (AM only) to work on the 10 meter CW band. I began to wonder if I could also make it work on the SSB subband. Has anyone out there ever added SSB capability to an AM transmitter? Is this a terribly hard thing to do? Any help would be greatly appreciated.

Kip Ingram
N5RYK
kipper@ccwf.cc.utexas.edu
(512)471-4496

Date: 23 Mar 91 03:32:56 GMT
From: hpcc05!hpsciz!rkarlqu@hplabs.hpl.hp.com
Subject: No Code issue makes Scientific American
To: info-hams@ucsd.edu

Please move this discussion to rec.radio.amateur.policy.
That group was specifically set up to unload this group
from code/no code discussions. Thank you.

Date: 25 Mar 91 12:37:54 GMT
From: news-mail-gateway@ucsd.edu
Subject: Radio LANs to become legal in the UK?
To: info-hams@ucsd.edu

The Department of Trade and Industry (DTI) has given its permission for the use of frequencies between 2.412 and 2.438GHz for the test and development of radio-based LANs, using a transmitted power of up to 250 milliwatts.

(No indication as to whether this is 250 milliwatts RF output, or 250 milliwatts ERP ??)

A UK company, Chasecom, is looking to sell an ARLAN derivative operating on these frequencies; NCR (makers of WaveLAN) consider the use of 2.4GHz as 'most promising'.

Note that the *USE* (as opposed to test/development) of LANs using these frequencies is still forbidden; the proposal states that eventually it is expected that such LANs may be operated without a license.

The use of the frequencies in the 900MHz band (as used in the USA) will continue to be forbidden; the UK uses the 900MHz band for its cellular telephone service.

Now all we need is to see if the cards can easily be migrated onto an amateur-band....

Pete Lucas PJML@UK.AC.NWL.IA G6WBJ@GB7SDN.GBR.EU

Date: 25 Mar 91 01:40:01 GMT
From: hpcc05!hpsciz!rkarlqu@hplabs.hpl.hp.com
Subject: Re: LSB vs USB ad infinitum
To: info-hams@ucsd.edu

I'm sorry. In my previous posting, I said that either 9 MHz. or 5 MHz. will work with a fixed USB IF. I was wrong and AL was right. When you subtract a 5 MHz. VFO from a 9 MHz. IF, the sideband is *not* inverted because it was the VFO, not the IF, which was subtracted. In this case, the subtraction merely makes the VFO tune backward.

N6RK

Date: 24 Mar 91 18:51:03 GMT
From: hpcc05!hpsciz!rkarlqu@hplabs.hpl.hp.com
Subject: Re: LSB vs USB ad infinitum
To: info-hams@ucsd.edu

> / hpsciz:rec.radio.amateur.misc / alanb@hpnmdla.hp.com (Alan Bloom) / 12:38 pm
Mar 22, 1991 /
> In rec.radio.amateur.misc, macmillan@iccgcc.decnet.ab.com writes:
>

> >In the never ending saga of LSB-USB I may have missed this item, but
> >just in case....
>
> >The dividing line between common use of LSB and USB seems to be 9 MHz.
> >If you were home brewing an SSB exciter you could get a two band
> >transmitter or transceiver with a 9 MHz USB IF and a 5.0-5.5 MHz VFO.
>
> >Add the two and USB appears from 14.0-14.5 MHz. Subtract and you will
> >get 4.0-3.5 MHz. The subtraction process has also inverted the sideband
> >and it is now LSB.
>
> >Simplicity and two DX bands in one box.
>
> Actually, the VFO must be around 9 MHz with the IF at 5+ MHz for the
> sidebands to come out opposite sign. This was the design for the old
> Central Electronics SSB exciter that started the SSB revolution back
> in the early 60's.
>
> AL N1AL
> -----

You're both right. Either system will generate USB at 14 MHz. and LSB at 3.5 MHz. starting with a USB signal at the IF. The 9 MHz. IF is by far the more popular one, probably because it is easier to build a stable VFO at 5 MHz. than 9 MHz., all other things being equal. Also, the size of the quartz in the 9 MHz. crystal filters is considerably smaller than in a 5 MHz. crystal filter hence allowing smaller, cheaper filters. I believe the 5 MHz. IF system of Central Electronics used the phasing method where you would want to keep the IF freq. as low as possible for less phase drift.

Rick N6RK
rkarlqu@scd.hp.com

Date: 25 Mar 91 11:13:04 GMT
From: news-mail-gateway@ucsd.edu
Subject: Reading Presence of Signal on ICOM R-7000
To: info-hams@ucsd.edu

The easiest way of doing this is to use the "tape recorder motor control" connector on the back panel of the rig as a carrier sense relay. The center conductor is connected to tground when a signal is present.

=====
Peter Simpson, KA1AXY

Data General Corp M/S E132
Westboro, MA 01580
(508) 870-9837
Pete_Simpson@MERCURY.MCEO.DG.COM

Date: 25 Mar 91 13:10:44 GMT
From: usc!cs.utexas.edu!ut-emx!ccwf.cc.utexas.edu@ucsd.edu
Subject: Searching for crystal(s)
To: info-hams@ucsd.edu

Hi. In my quest to modify my old CB rig for 10 meter band operation, I've decided that I need a crystal lying in the range 10.14 MHz to 10.23 MHz in order to fully utilize all 23 channels of the unit. A second crystal that is 455 KHz higher would be nice as well (guess why), but isn't crucial as I plan to use a separate receiver.

I haven't been able to locate a suitable crystal; if anyone out there can find one it'd be great.

Thanks,
Kip
N5RYK

Date: 25 Mar 91 17:20:56 GMT
From: sdd.hp.com!hp-pcd!hplsla!tomb@ucsd.edu
Subject: Searching for crystal(s)
To: info-hams@ucsd.edu

Re: finding crystals in arbitrary frequency ranges: Maybe someone will come through with some from a junk box, but in general, you can get what you need from places like JAN Crystals. They take VISA orders over the phone. They are a bit slow (a couple weeks), but you generally will spend a lot more than the \$10 or so per crystal trying to find just the frequency, tolerance, case style, mode, etc., that you want. You can reach them at (800)526-9825. You can just ask for a catalog, or order up just what you want.

73, K7ITM

Date: 24 Mar 91 23:39:21 GMT
From: rex!wuarchive!zaphod.mps.ohio-state.edu!uwm.edu!linac!att!pacbell.com!
pacbell!noe!marc@ames.arpa

Subject: the Freeband below 10 meters
To: info-hams@ucsd.edu

I've done some listening on the Freeband, that garbage-pail piece of spectrum between the CB band and the bottom of 10 meters. Over the last couple of years, the skip has been spectacular for the boot-leggers.

I was disappointed to hear a couple of Spanish-speaking operators running SSB at about 28030 one day. After listening for five minutes or so, someone threw a carrier on the frequency and started tuning up. The SSB operators started commenting about it. Presently, another carrier came up on the frequency. And then another. And another!

The SSB guys moved down to 28020 and resumed their conversation. They were joined once again by several carriers. Their remarks at this time were pretty sour. They moved once again, got jammed once again, and finally disappeared.

Well, maybe that's the way to deal with these guys. Let 'em know that they can't come above 28000 kHz. Calling the FCC sure doesn't help.

^M

--

Marc de Groot KG6KF	"The all-American boy prefers beauty
Internet: marc@kg6kf.ampr.org	to brains because he can see better
UUCP: uunet!hoptoad!noe!marc	than he can think." -Farrah Fawcett
Packet radio: KG6KF @ K3MC	

Date: 25 Mar 91 15:49:32 GMT
From: usc!rpi!glickman@ucsd.edu
Subject: the Freeband below 10 meters
To: info-hams@ucsd.edu

I think that what is happening between 28.000 and 28.100 is truly disgusting, but what can we do about it??

The other day, I noted several SSB, AM, and FM Freebander QSO's within this range. Most were speaking Spanish. 28.025, 28.045, and 28.075 seem to be "channels". I recently spoke with someone who said that they say a list of freeband channels. This list started at 26 Mhz and went up to 28.100!!!

As was posted in the previous Freeband message, I began to hear several loud carriers after a while at which point the Freebanders QSY'ed to another freq. within the 28.000-28.100 range. The carriers followed them until they went away....When will they learn?

Gee, they have 2 full MHZ (26-28), why do they have to creep above 28 Mhz?
The CW there doesn't seem to phase them, but perhaps the reason they stop
at 28.100 is the packet activity found up there....
Who knows...

=====
Joel Glickman (KA1PRT@mts.rpi.edu)
W2SZ - RPI Amateur Radio Club
W2SZ/1 - Mt. Greylock Expeditionary Force (See U in June)

Date: 25 Mar 91 19:35:12 GMT
From: ogicse!plains!enders%plains.NoDak.edu@ucsd.edu
Subject: WANTED: Collins 32V-2 Manual...
To: info-hams@ucsd.edu

After attending a recent hamfest, I am the proud owner of a
genuine Collins 32V-2 transmitter, which I purchased for the nice
price of \$50!!! It even has output, the VFO works, etc. However,
No manual (so what else is new :-).

I'm hoping somebody out there could help me locate the manual,
or a decent photocopy. Does Rockwell/Collins still have manuals for
such old equipment lying about? Any help would be most appreciated!!

73,

=====
Todd Enders - WD0BCI ARPA: enders@plains.nodak.edu
Computer Center UUCP: ...!uunet!plains!enders
Minot State University or: ...!hplabs!hp-lsd!plains!enders
Minot, ND 58701 Bitnet: enders@plains

"The present would be full of all possible futures,
if the past had not already projected a pattern upon it" - Andre' Gide

Date: 25 Mar 91 17:51:48 GMT
From: swrinde!zaphod.mps.ohio-state.edu!unix.cis.pitt.edu!dsinc!netnews.upenn.edu!

platypus!bill@ucsd.edu
To: info-hams@ucsd.edu

References <9103192122.AA01566@ucsd.edu>, <andreap.669677698@s.ms.uky.edu>,
<1991Mar23.015848.27076@bellcore.bellcore.com>
Subject : Re: First No-code Tech?

In article <1991Mar23.015848.27076@bellcore.bellcore.com>, karn@epic.bellcore.com
(Phil R. Karn) writes:

> In article <andreap.669677698@s.ms.uky.edu>, andreap@ms.uky.edu (Peach) writes:
> |> This lady, and I fear, many others entering our number do not share
> |> this feeling. She was getting licensed so that she could talk
> |> to her husband -- not because she loves radio.
>
> I think it is probably safe to say that even before no-code, many (if
> not most) women entered amateur radio for the same reason. It just
> reflects the differing attitudes that men and women have been
> conditioned to have towards having an interest in technology. This is
> not to say that women who initially enter amateur radio just to talk
> to their husbands can't discover an interest in another facet of the
> service.

I have to admit that when my wife first decided to go for her license she
wanted little more than the ability to talk to me when we were in different
places. Then she discovered 6 meters and VHF Contesting. I have never beaten
her in a contest. Things got quiet when we moved back to PA. No room for
any antennae, not even for VHF. But this week we close on a place ouf our own
with a pretty good size lot. And while I have been worrying about things
like plumbing, electricity and furnaces, I find out my wife has been digging
thru the AES catalog gathering prices for towers.
And on top of that, just last week she asked me what she needed to do to
upgrade to GENERAL.

Still think we should be driving these people towards other services??
I don't.

bill KB3YV

--

Bill Gunshannon		If this statement wasn't here,
bill@platypus.uofs.edu		This space would be left intentionally blank
bill@tuatara.uofs.edu		#include <std disclaimer.h>

End of Info-Hams Digest
